

# Sequence Listing

<110> Leonard Presta

<120> Polypeptide Variants with Altered Effector Function

<130> P1726R1

<141> 2000-01-14

<150> US 60/116,023

<151> 1999-01-15

<160> 11

<210> 1

<211> 218

<212> PRT

<213> Artificial Sequence

<220>

<221> Artificial Sequence

<222> 1-218

<223> Sequence is completely synthesized

<400> 1

Asp	Ile	Gln	Leu	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	15
1				5					10						
Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Lys	Pro	Val	Asp	30
				20					25						
Gly	Glu	Gly	Asp	Ser	Tyr	Met	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	45
				35					40						
Lys	Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ala	Ala	Ser	Tyr	Leu	Glu	Ser	60
				50					55						
Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	75
				65					70						
Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	90
				80					85						
Tyr	Cys	Gln	Gln	Ser	His	Glu	Asp	Pro	Tyr	Thr	Phe	Gly	Gln	Gly	105
				95					100						
Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	120
				110					115						
Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	135
				125					130						
Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	150
				140					145						
Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	Glu	165
				155					160						

Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser  
170 175 180

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val  
185 190 195

Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr  
200 205 210

Lys Ser Phe Asn Arg Gly Glu Cys  
215 218

<210> 2

<211> 451

<212> PRT

<213> Artificial Sequence

<220>

<221> Artificial Sequence

<222> 1-451

<223> Sequence is completely synthesized

<400> 2

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly  
1 5 10 15

Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Tyr Ser Ile Thr  
20 25 30

Ser Gly Tyr Ser Trp Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly  
35 40 45

Leu Glu Trp Val Ala Ser Ile Lys Tyr Ser Gly Glu Thr Lys Tyr  
50 55 60

Asn Pro Ser Val Lys Gly Arg Ile Thr Ile Ser Arg Asp Asp Ser  
65 70 75

Lys Asn Thr Phe Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp  
80 85 90

Thr Ala Val Tyr Tyr Cys Ala Arg Gly Ser His Tyr Phe Gly His  
95 100 105

Trp His Phe Ala Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser  
110 115 120

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser  
125 130 135

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val  
140 145 150

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly  
155 160 165

Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser  
170 175 180

Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser 195  
 185 190  
 Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro 210  
 200 205  
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp 225  
 215 220  
 Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly 240  
 230 235  
 Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu 255  
 245 250  
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val 270  
 260 265  
 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly 285  
 275 280  
 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr 300  
 290 295  
 Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln 315  
 305 310  
 Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys 330  
 320 325  
 Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly 345  
 335 340  
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu 360  
 350 355  
 Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly 375  
 365 370  
 Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln 390  
 380 385  
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp 405  
 395 400  
 Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg 420  
 410 415  
 Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala 435  
 425 430  
 Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly 450  
 440 445  
 Lys  
 451

[illegible]

```
<210> 4
<211> 218
<212> PRT
<213> homo sapiens
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<400> 4  
 Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro 15  
 1 5 10  
 Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val 30  
 20 25  
 Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys 45  
 35 40  
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr 60  
 50 55  
 Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser 75  
 65 70  
 Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr 90  
 80 85  
 Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys 105  
 95 100  
 Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr 120  
 110 115  
 Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser 135  
 125 130  
 Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val 150  
 140 145  
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr 165  
 155 160  
 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys 180  
 170 175  
 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser 195  
 185 190  
 Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys 210  
 200 205  
 Ser Leu Ser Leu Ser Pro Gly Lys 218  
 215

<210> 5  
 <211> 217  
 <212> PRT  
 <213> homo sapiens

<400> 5  
 Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro 15  
 1 5 10  
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr 30  
 20 25

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe  
35 40 45

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
50 55 60

Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val  
65 70 75

Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys  
80 85 90

Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr  
95 100 105

Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr  
110 115 120

Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu  
125 130 135

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu  
140 145 150

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro  
155 160 165

Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu  
170 175 180

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys  
185 190 195

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser  
200 205 210

Leu Ser Leu Ser Pro Gly Lys  
215 217

<210> 6

<211> 218

<212> PRT

<213> homo sapiens

<400> 6

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro  
1 5 10 15

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val  
20 25 30

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
35 40 45

Phe Lys Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr  
50 55 60

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser  
65 70 75

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr  
80 85 90

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys  
95 100 105

Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr  
110 115 120

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser  
125 130 135

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val  
140 145 150

Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn Tyr Asn Thr Thr  
155 160 165

Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys  
170 175 180

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile Phe Ser  
185 190 195

Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln Lys  
200 205 210

Ser Leu Ser Leu Ser Pro Gly Lys  
215 218

<210> 7

<211> 218

<212> PRT

<213> homo sapiens

<400> 7

Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro  
1 5 10 15

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val  
20 25 30

Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln  
35 40 45

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr  
50 55 60

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser  
65 70 75

Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr  
80 85 90

Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys  
95 100 105

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr  
110 115 120

Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser  
125 130 135

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val  
140 145 150

Glu Trp Glx Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr  
155 160 165

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg  
170 175 180

Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser  
185 190 195

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys  
200 205 210

Ser Leu Ser Leu Ser Leu Gly Lys  
215 218

<210> 8

<211> 215

<212> PRT

<213> Mus musculus

<400> 8

Thr Val Pro Glu Val Ser Ser Val Phe Ile Phe Pro Pro Lys Pro  
1 5 10 15

Lys Asp Val Leu Thr Ile Thr Leu Thr Pro Lys Val Thr Cys Val  
20 25 30

Val Val Asp Ile Ser Lys Asp Asp Pro Glu Val Gln Phe Ser Trp  
35 40 45

Phe Val Asp Asp Val Glu Val His Thr Ala Gln Thr Gln Pro Arg  
50 55 60

Glu Glu Gln Phe Asn Ser Thr Phe Arg Ser Val Ser Glu Leu Pro  
65 70 75

Ile Met His Gln Asp Cys Leu Asn Gly Lys Glu Phe Lys Cys Arg  
80 85 90

Val Asn Ser Ala Ala Phe Pro Ala Pro Ile Glu Lys Thr Ile Ser  
95 100 105

Lys Thr Lys Gly Arg Pro Lys Ala Pro Gln Val Tyr Thr Ile Pro  
110 115 120



Pro Pro Lys Glu Gln Met Ala Lys Asp Lys Val Ser Leu Thr Cys  
125 130 135

Met Ile Thr Asp Phe Phe Pro Glu Asp Ile Thr Val Glu Trp Gln  
140 145 150

Trp Asn Gly Gln Pro Ala Glu Asn Tyr Lys Asn Thr Gln Pro Ile  
155 160 165

Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr Ser Lys Leu Asn Val  
170 175 180

Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe Thr Cys Ser Val  
185 190 195

Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser Leu Ser  
200 205 210

His Ser Pro Gly Lys  
215

<210> 9

<211> 218

<212> PRT

<213> Mus musculus

<400> 9

Pro Ala Pro Asn Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro  
1 5 10 15

Pro Lys Ile Lys Asp Val Leu Met Ile Ser Leu Ser Pro Ile Val  
20 25 30

Thr Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln  
35 40 45

Ile Ser Trp Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr  
50 55 60

Gln Thr His Arg Glu Asp Tyr Asn Ser Thr Leu Arg Val Val Ser  
65 70 75

Ala Leu Pro Ile Gln His Gln Asp Trp Met Ser Gly Lys Glu Phe  
80 85 90

Lys Cys Lys Val Asn Asn Lys Asp Leu Pro Ala Pro Ile Glu Arg  
95 100 105

Thr Ile Ser Lys Pro Lys Gly Ser Val Arg Ala Pro Gln Val Tyr  
110 115 120

Val Leu Pro Pro Pro Glu Glu Glu Met Thr Lys Lys Gln Val Thr  
125 130 135

Leu Thr Cys Met Val Thr Asp Phe Met Pro Glu Asp Ile Tyr Val  
140 145 150

Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu Asn Tyr Lys Asn Thr  
155 160 165

Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe Met Tyr Ser Lys  
170 175 180

Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn Ser Tyr Ser  
185 190 195

Cys Ser Val Val His Glu Gly Leu His Asn His His Thr Thr Lys  
200 205 210

Ser Phe Ser Arg Thr Pro Gly Lys  
215 218

<210> 10  
<211> 218  
<212> PRT  
<213> Mus musculus

<400> 10  
Pro Ala Pro Asn Leu Glu Gly Gly Pro Ser Val Phe Ile Phe Pro  
1 5 10 15

Pro Asn Ile Lys Asp Val Leu Met Ile Ser Leu Thr Pro Lys Val  
20 25 30

Thr Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln  
35 40 45

Ile Ser Trp Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr  
50 55 60

Gln Thr His Arg Glu Asp Tyr Asn Ser Thr Ile Arg Val Val Ser  
65 70 75

His Leu Pro Ile Gln His Gln Asp Trp Met Ser Gly Lys Glu Phe  
80 85 90

Lys Cys Lys Val Asn Asn Lys Asp Leu Pro Ser Pro Ile Glu Arg  
95 100 105

Thr Ile Ser Lys Pro Lys Gly Leu Val Arg Ala Pro Gln Val Tyr  
110 115 120

Thr Leu Pro Pro Pro Ala Glu Gln Leu Ser Arg Lys Asp Val Ser  
125 130 135

Leu Thr Cys Leu Val Val Gly Phe Asn Pro Gly Asp Ile Ser Val  
140 145 150

Glu Trp Thr Ser Asn Gly His Thr Glu Glu Asn Tyr Lys Asp Thr  
155 160 165

Ala Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe Ile Tyr Ser Lys  
170 175 180

Leu Asn Met Lys Thr Ser Lys Trp Glu Lys Thr Asp Ser Phe Ser  
185 190 195

Cys Asn Val Arg His Glu Gly Leu Lys Asn Tyr Tyr Leu Lys Lys  
200 205 210

Thr Ile Ser Arg Ser Pro Gly Lys  
215 218

<210> 11  
<211> 218  
<212> PRT  
<213> Mus musculus

<400> 11  
Pro Pro Gly Asn Ile Leu Gly Gly Pro Ser Val Phe Ile Phe Pro  
1 5 10 15

Pro Lys Pro Lys Asp Ala Leu Met Ile Ser Leu Thr Pro Lys Val  
20 25 30

Thr Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val His  
35 40 45

Val Ser Trp Phe Val Asp Asn Lys Glu Val His Thr Ala Trp Thr  
50 55 60

Gln Pro Arg Glu Ala Gln Tyr Asn Ser Thr Phe Arg Val Val Ser  
65 70 75

Ala Leu Pro Ile Gln His Gln Asp Trp Met Arg Gly Lys Glu Phe  
80 85 90

Lys Cys Lys Val Asn Asn Lys Ala Leu Pro Ala Pro Ile Glu Arg  
95 100 105

Thr Ile Ser Lys Pro Lys Gly Arg Ala Gln Thr Pro Gln Val Tyr  
110 115 120

Thr Ile Pro Pro Pro Arg Glu Gln Met Ser Lys Lys Lys Val Ser  
125 130 135

Leu Thr Cys Leu Val Thr Asn Phe Phe Ser Glu Ala Ile Ser Val  
140 145 150

Glu Trp Glu Arg Asn Gly Glu Leu Glu Gln Asp Tyr Lys Asn Thr  
155 160 165

Pro Pro Ile Leu Asp Ser Asp Gly Thr Tyr Phe Leu Tyr Ser Lys  
170 175 180

Leu Thr Val Asp Thr Asp Ser Trp Leu Gln Gly Glu Ile Phe Thr  
185 190 195

Cys Ser Val Val His Glu Ala Leu His Asn His His Thr Gln Lys  
200 205 210

Asn Leu Ser Arg Ser Pro Gly Lys  
215 218

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